



## Dr. A V S S Kumara Swami Gupta

M Tech (RECW), Ph D(IITKGP)

**Senior Professor**

**ISTE, ISHMT**

Mechanical Engineering

### Areas of Interest:

Thermodynamic analysis of advanced power cycles, Combined Cycles, Clean Coal Technologies, Coal gasification, Bio mass energy, Circulating Fluidized Beds and Finite element analysis.

Dr Gupta has completed his Bachelor degree in Mechanical Engineering from JNTU College of Engineering, Anantapur in 1993, Masters degree in Mechanical Engineering from Regional Engineering College, Warangal (RECW) and Doctoral degree from Indian Institute of Technology, Kharagpur (IITKGP) in the year 1999. After obtaining the doctorate degree, he joined as Asst Manager (R&D Division), TATA STEEL, Jamshedpur from 1999 to 2001 and came for teaching in 2001. He joined as Asst Professor in JNTUH College of Engineering in 2001, Promoted as Associate Professor in 2003 and as Professor in 2011. He did his post Ph D research work at University of New Brunswick, Fredericton, CANADA in the year 2004.

He has done several administrative responsibilities at JNTUH as Head of the Department, Controller of Examinations, TEQIP - III (ATU) Coordinator, Special Officer, Nodal Centre Incharge, Officer in charge of Examinations, Hostel Manager for both Boys and Girls Hostels, Deputy Warden for Boys hostels etc.

He visited different countries to present papers and post research work namely USA, CANADA, Singapore, Malaysia, Hongkong, Thailand, Indonesia etc.

He is a National Executive Council Member for ISTE (2020-2024) and Secretary cum Treasurer of ISTE, Telangana state section. He is a Life member of ISTE and ISHMT.

To his credit, he has published more than 175 papers in International and National Journals and Conferences and already guided 23 doctoral students. Eight more students are pursuing their doctoral work under his supervision. In addition, He has guided 75 Post graduation projects and 65 under graduation projects.

He is the member for NAAC and AICTE peer review committee member.

He received second best paper award from TATA SERCH journal in 2001 and certificate of Merit for the paper published the Institution of Engineers journal in 2000.

### -> Educational & Professional

#### -> Academic Qualifications

-> Ph D in MECHANICAL ENGINEERING, Indian Institute of Technology, Kharagpur with 1st DIVISION (1995-1999)

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M.Tech in Mechanical Engineering, Regional Engineering College Warangal with 1st Division (1993-1995)

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B.Tech in MECHANICAL ENGINEERING, J N T U College of Engineering, Anantapur with 1st Division with Distinction (1989-1993)

#### -> Professional Experience

#### -> Industrial Experience

-> Assistant Manager, TATA STEEL, JAMSHEDPUR (1999 - 2001)

#### -> At JNTUH

-> Professor, J N T U C E, Hyderabad (2011 - Till Date)

-> Associate Professor, J N T U C E, Hyderabad (2003 - 2010)

-> Assistant Professor, J N T U C E, Hyderabad (2001 - 2003)

#### -> Research

#### -> Research Projects

-> *Experimental Investigations on Augmentation of heat transfer in a shell and heat exchanger*, funded by TEQIP - III (ATU) - ASTU - 2,85,000/- (sanctioned in 2019 duration of 3 years)

-> *Experimental Investigation of the spray characteristics of Nanoparticles blended water-diesel emulsion fuels*, funded by TEQIP - III (ATU) - 2,99,000/- (sanctioned in 2019 duration of 3 years)

#### -> Publications

- > A.V.S.S.K.S.Gupta, P. Rakesh, V.V.Venu Madhav, *STUDY OF FRACTURE BEHAVIOUR OF COMPOSITE LAMINATE WITH CENTRAL CIRCULAR CRACK EXPOSED TO THERMO-MECHANICAL LOADING WITH TEMPERATURE RISE*, Published in Journal of Mechanical Engineering Research & Developments (JMERD), ISBN No.Published in Journal of Mechanical Engineering Research & Developments (JMERD), Vol No.42, Issue No.3, pp.125-132, 2019
- > A.V.S.S.K.S.Gupta, P. Rakesh, V.V.Venu Madhav, *Study of Fracture Behaviour of a Composite Laminate [0o/90o] With Circular Crack Subjected To Temperature Fall Loading*, Published in IOSR Journal of Mechanical and Civil Engineering, ISBN No.1684,p-ISSN: 2320-334X, Vol No.16, Issue No.3, pp.30-37, may-june, 2019
- > A.V.S.S.K.S.Gupta, P. Rakesh, V.V.Venu Madhav, *Study of Fracture Behaviour of a Composite Laminate [0o/90o] With Circular Crack Subjected to Thermo-Mechanical Loading with Temperature Fall*, Published in IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE), ISBN No.2278-1684, Vol No.16, Issue No.3, pp.38-45, may-june, 2019
- > Gupta, A.V.S.S.K.S, Deepak, K, *Thermodynamic analysis of Kalina cycle configurations for utilisation of geothermal energy*, Progress in Industrial Ecology, An International Journal (PIE), Vol No.12, Issue No.1/2, pp.164-179, october, 2018
- > A.V.S.S.K.S.Gupta, V.V.Venu Madhav, V.BalakrishnaMurthy, *Thermo-Elastic fracture Analysis of Angle-Ply Laminates.*, pp.6045-6052, 2018
- > A.V.S.S.K.S.Gupta, V.V.Venu Madhav, Potluri Rakesh, *Fracture behaviour Study on the Cross-Ply Composite Laminate with a Circular Hole Subjected to Thermo-Mechanical Loading with Temperature Rise.*, Published in International Journal of Applied Engineering Research (IJAER), . Vol No.13, pp.16238-1644, november, 2018
- > A.V.S.S.K.S.Gupta, Potluri Rakesh, V.V.Venu Madhav, *Fracture behaviour Study on the Cross-Ply Composite Laminate with a Circular Hole Subjected to Thermo-Mechanical Loading with Temperature Fall.*, International Journal of Applied Engineering Research (IJAER), ISBN No.0973-4562, Vol No.13, pp.16245-16251, november, 2018
- > Gupta, A.V.S.S.K.S, Deepak, K, *Performance Augmentation of Low Temperature Kalina Cycle System*, IEEE Xplore, IEEE Publication, ISBN No.978-1-4673-9939-5, 2016
- > Gupta A.V.S.S.K.S., Srinivas T, Deepak K, *Comparative Study of Augmentation in Low Temperature Kalina Cycle Systems*, International Journal of Application of Engineering and Technology, ISBN No.2395-3594, Vol No.2, Issue No.3, pp.211-216, 2015
- > A V S S K S Gupta, K.Rama Narasimha, Ch.Sreenivasa Rao, *Parametric Investigations on the flow characteristics of a closed loop pulsating heat pipe- A numerical study*, Int J. of Mechanical Engineering and Technology, Vol No.5, Issue No.9, pp.271-279, 2014
- > A V S S K S Gupta, K.Rama Narasimha, Ch. Sreenivasa Rao, K.Rama Narasimha, *A numerical Study on the significance of non dimensional numbers on the performance of closed loop pulsating heat pipe.*, Int Journal of Mechanical Engineering, Vol No.4, Issue No.3, pp.1-10, 2014
- > A.V.S.S.K.S. Gupta, K Deepak, T Srinivas, S V Prabhakar Vattikuti, *Investigation of Separator Parameters in Kalina Cycle Systems*, International Journal of Current Engineering and Technology, ISBN No.2277 â€” 4106, pp.496-500, 2014
- > Gupta A.V.S.S.K.S, D.R., Pandurangadu, Srinivasan, *Influence of liquid fuel injection velocities on combustion in a taper can gas turbine combustion chamber*, Int. Journal of Engineering Science and Innovative technology, Vol No.2, Issue No.6, pp.167-173, 2013
- > Gupta A V S S K S, Santosh Kumar G, Suresh Kumar G, *A review of pre-combustion CO2 Capture in I G C C, I J R E T*, 2013
- > Gupta A V S S K S, Modhammed Qazam Naser , *Structural and Thermal Analysis of Pressure vessel by using ANSYS*, Int Journal of Scientific Engineering and Technology Research, Vol No.2, Issue No.8, pp.740-744, 2013
- > Gupta A V S S K S , Rama Narasimha K, Sreenivasa Rao, *Effect of Design parameters on the performance of a closed loop pulsating heat pipe*, Int. Journal of Mechanical Engineering and Technology, Vol No.4, Issue No.3, pp.306-317, 2013
- > Gupta A V S S K S , *Comparison of train values of PGT for different structural aspects like symmetry, compactness and driver speed*, Int Journal of Current Research, Vol No.5, Issue No.5, pp.1138-1141, 2013
- > Gupta A V S S S, Venkateswara Rao G, Sridhar Patnaik V, *Thermal Post buckling of clamped stepped compound beams made of two symmetrically distributed materials*, Int. Journal of Innovative Resarch and Studies, ISBN No.2319 â€” 9725, Vol No.2, Issue No.12, pp.501-533, 2013
- > Gupta A V S S K S, Sridhar Patnaik V, Venkateswara Rao G, *Optimum design for minimum mass configuration of stepped cantilever compound columns with constraint on axial buckling load*, International Journal of Scientific and Engineering Research, Vol No.4, Issue No.10, pp.956-965, 2013
- > Gupta A V S S K S, Sridhar Patnaik V, Venkateswara Rao G, *Post Buckling analysis of a simply supported compound beams made of two symmetrically distributed materials under uniform thermal loading*, Vol No.9, Issue No.2, pp.70-80, 2013
- > Gupta A V S S K S , Krishnaiah A, Narendar G, *Investigation on Natural Circulation Loop with compact heat exchanger as heat sources and using nano fluids as loop fluid*, International Journal of Systems, Algorithms and applications, Vol No.3, pp.31-34, 2013
- > A V S S K S Gupta, K. Rama Narasimha, Ch. Sreenivasa Rao, *Influence of working fluid on the performance of a single loop pulsating heat pipe*, Int. Journal of Emerging Technology and Advanced Engineering, Vol No.3, Issue No.4, pp.460-464, 2013
- > Gupta A V S S K S, Deepak K, Srinivas T, Prabhakar S V, Deva Prasad S, *Investigations of separator parameters in Kalina cycle systems*, Int. Journal of Current Engineering and Technology, 2013
- > A V S S K S Gupta, K. Rama Narasimha, Ch. Sreenivasa Rao, *Effect of design parameters on the performance of a closed loop pulsating heat pipe*, International Journal of Mechanical Engineering and Technology, Vol No.4, Issue No.3, pp.306-317, 2013
- > A.V.S.S.K.S.Gupta, Swami Naidu Gurugubelli, N.R.M.R.Bhargava, *Deformation Inhomogeneity of Al â€” 2Mg and Al â€” 8 Mg alloys â€” microhardness study*, Int. J. Materials Engineering Innovation, Vol No.03, Issue No.01, 2012
- > A.V.S.S.K.S.Gupta, T. Srinivas, B.V. Reddy, *Thermal Performance Prediction of a Biomass Based Integrated Gasification Combined Cycle Plant*, Transfer of ASME, Journal of Energy Resource Technology, Vol No.134, pp.210021-210029, 2012
- > A.V.S.S.K.S.Gupta, Swami Naidu Gurubelli, N.R.M.R.Bhargava, *Deformational inhomogeneity in Al-8Mg alloy â€” Microhardness Study*, Int. J. Material and Structural Integrity, 2012
- > A.V.S.S.K.S.Gupta, P.V.Durga Prasad, L. Syam Sunder, *Heat Transfer Enhancement by using twisted tape inside a double pipe U-bend Heat Exchanger*, Int. J. of Thermal Science and Engineering, Vol No.2, Issue No.2, 2012
- > A.V.S.S.K.S.Gupta , M.V.S.Murali Krishna, K. Kisor, P.V.K.Murthy, S. Narasimha Kumar, *Comparative Studies on Performance Evaluation of a two stroke copper coated spark ignition engine with alcohols with catalytic converter*, Int J. of Renewable and Sustainable Energy Reviews, Elsevier Publications, Vol No.16, pp.6339-6339, 2012
- > A.V.S.S.K.S.Gupta, M.V.S.Murali Krishna, K. Kisor, P.V.K.Murthy, *Control of Exhaust Emissions from Copper Coated Two Stroke Spark Ignition Engine with Methanol Blended Gasoline with Catalytic Converter*, International Journal of Engineering and Innovative Technologies, Vol No.1, Issue No.5, pp.9-16, 2012
- > A.V.S.S.K.S.Gupta , M.V.S.Murali Krishna, K. Kisor, P.V.K.Murthy, S. Narasimha Kumar, *Comparative Studies on Performance Evaluation of a two stroke copper coated spark ignition engine with alcohols with catalytic converter*, Int J. of Scientific and Technology Research, Vol No.1, Issue No.2, pp.85-90, 2012
- > A.V.S.S.K.S.Gupta, M.V.S.Murali Krishna, K. Kisor, P.V.K.Murthy, *Performance of Copper Coated two stroke spark ignition engine with methanol blended gasoline with catalytic converter*, Int. Journal of Renewable and Sustainable Energy, Vol No.4, pp.131021-131029, 2012
- > Gupta A V S S K S, Sri Rama Murthy M , *Flow and Heat transfer characteristics Over NACA0018 Aerofoil*, Int. Journal of Engineering Research and Technology, Vol No.1, Issue No.9, pp.1-13, 2012
- > Gupta A V S S S, Sridhar Patnaik V, Venkateswara Rao G , *Minimum mass design of compound cantilever columns with buckling load constraint through numerical search*, Int J Mech Engg and Rob. Res, Vol No.1, Issue No.2, pp.196-206, 2012
- > Gupta A V S S K S , Narendar G, Krishnaiah A, *CFD analysis of natural circulation loop*, Int Journal on Mechanical and Automobile Engineering, Vol No.22, Issue No.1, pp.46-52, 2012
- > A.V.S.S.K.S.Gupta, T. Srinivas, B.V. Reddy, *Parametric Simulation of Combined Cycle Power Plant â€” A Case Study*, International Journal of Thermodynamics, Vol No.14, Issue No.01, pp.29-36, 2011
- > A.V.S.S.K.S.Gupta, A.V.Ratna Prasad, K. Mohan Rao, B.V.Reddy, *A Study on flexural properties of wild cane grass fiber-reinforced polyester composites*, J. of Material Science, Springer publications, Vol No.46, pp.2627-2634, 2011
- > A.V.S.S.K.S.Gupta, I. Satyanarayana, K.G.Rajulu, K.Susheela, *Exergy Analysis and parametric study of reheater regenerative ultra supercritical Rankine cycle with feed water heaters*, Int J of Mechanical and Materials Engineering, Vol No.06, Issue No.02, pp.250-259, 2011
- > A.V.S.S.K.S.gupta , M. Sreeramulu, T. Srinivas, *Exergy Analysis of Gas Turbine â€” Fuel cell based Combined Cycle Power Plant*, Int. J. of Engineering Science and Technology, Vol No.3, Issue No.6, pp.5227-5236, 2011
- > A.V.S.S.K.S.Gupta, M. Sreeramulu, *Exergy Analysis of Gas turbine solid oxide fuel cell based combined cycle power plant*, ISBN No.Int. J. Energy Technology and Policy, Vol No.7, Issue No.5/6, pp.469-488, 2011
- > A.V.S.S.K.S.Gupta , G. Swami Naidu, N.R.M.R.Bhargava, *Ageing and Corrosion Studies of Cast Al-8wt%Mg Alloys*, Int. J. of Materials Science, Vol No.6, Issue No.2, pp.197-201, 2011
- > A.V.S.S.K.S.Gupta, B.V.Reddy, T.Srinivas, *Biomass Based Integrated Power Systems*, Caledonian Journal of Engineering, Vol No.7, Issue No.1, pp.1-5, 2011
- > A.V.S.S.K.S.Gupta, P.V.K.Murthy, K. Kisor, 40, M.V.S.Murali Krishna, *Emissions from Copper Coated Two Stroke Spark Ignition Engine with Methano blended Gasoline with Catalytic Converter*, Int. Journal of Applied Engineering Research, Vol No.6, Issue No.21, pp.2507-2516, 2011
- > A.V.S.S.K.S.Gupta , I Satyanarayana, K. Govindarajulu, *Exergy Analysis of Supercritical Cycle for 1000 MW Power Generation Using Without Reheat, Single and Double Reheat*, Int. J. of Mechanical Engineering, Vol No.07, Issue No.01, pp.91-107, 2010
- > A.V.S.S.K.S.Gupta, D.R.Srinivasan, M. Srinivasa Reddy, V. Panduragadu, K. Hemachandra Reddy, *The Simulation of the Effect of Fuel Spray Entrance Direction Vector on Temperature and Turbulent Kinetic Energy in the Gas Turbine Combustion Chamber*, Int. J. of Fluids Engineering, Vol No.02, Issue No.01, pp.45-55, 2010
- > A.V.S.S.K.S.Gupta, P. Venkataramana, G. Madhusudhana Reddy, T. Mohandas, *Microstrucuter and residual stress distribution of similar and dissimilar electron beam welds â€” Maraging steel to medium carbon steel*, Vol No.31, pp.749-760, 2010
- > A.V.S.S.K.S. Gupta, T. Srinivas, B.V. Reddy, *Biomass-fuelled integrated power and refrigeration system*, Proc. I Mech E Part A: J. Power and Energy, Vol No.225, pp.249-258, 2010
- > A.V.S.S.K.S. Gupta, T. Srinivas, B.V. Reddy, *Thermodynamic Equilibrium Model and Exergy Analysis of a Biomass Gasifier*, Transfer of ASME, Journal of Energy Resource Technology, Vol No.131, pp.31801-31817, 2009
- > A.V.S.S.K.S. Gupta, T. Srinivas, B.V. Reddy, *Carbon dioxide emission reduction from combined cycle with partial oxidation of natural gas*, International Energy for Sustainable Development, Vol No.13, pp.33-37, 2009
- > A.V.S.S.K.S.Gupta, P. Venkata Ramana, G. Madhusudhan Reddy , *Influence of parent metal mechanical properties on those of the different ultra high strength steel electron beam welds*, Steel Grips, Vol No.7, Issue No.6, pp.441-448, 2009
- > A.V.S.S.K.S.Gupta , Ratnakar Pandu, P. Ravinder Reddy, *Simulation Studies on Dynamic Response of Single -Walled Carbon Nanotubes under Bending-buckling Loads - an FEA Approach*, Int Journal of Nanotechnology and Applications, Vol No.3, Issue No.2, pp.49-60, 2009
- > A V S S K S Gupta, N. Sharath Chandra , P. Ravinder Reddy, P. Ashok Kumar, *Investigation of Stress Intensity Factor for a Plate with Hole Using FEA*, Int. Journal of Theoretical and Applied Mechanics, Vol No.4, Issue No.3, pp.223-233, 2009
- > A.V.S.S.K.S.Gupta, T. Srinivas, B.V. Reddy, *Performance Simulation of Combined Cycle with Kalina Bottoming Cycle*, Cogeneration and Distributed Generation Journal, Vol No.23, Issue No.1, Taylor and Francis Group, 2008
- > A.V.S.S.K.S. Gupta, T. Srinivas, B.V. Reddy, *Parametric Exergy analysis of Coal Gasifier and Gas Turbine Combustion Chamber with Emission Study*, International Journal of Energy, Vol No.9, pp.33-44, 2008
- > A.V.S.S.K.S. Gupta, T. Srinivas, B.V. Reddy, *Sensitivity Analysis of STIG based Combined Cycle with dual pressure HRSG*, Internal Journal of Thermal Sciences, Vol No.47, pp.1226-1234, 2008
- > A.V.S.S.K.S. Gupta , T. Srinivas, B.V. Reddy, *Thermodynamic Simulation of A Combined Cycle Power Plant At Part Load Operations*, Cogeneration and Distributed Generation Journal, Vol No.23, pp.40-53, 2008
- > A.V.S.S.K.S. Gupta , T. Srinivas, B.V. Reddy, *Parametric Simulation of Steam Injected Gas Turbine combine cycle*, International Journal of â€” I Mech E, Part A: Power and Energy, Vol No.221, Issue No.7, pp.873-883, 2007
- > A.V.S.S.K.S. Gupta , T. Srinivas, B.V. Reddy, *Generalised Thermodynamic Analysis of Steam Power Cycle with â€” Number of Feed Water Heater*, Int. J. of Thermodynamics, Vol No.10, Issue No.4, pp.177-185, 2007
- > A.V.S.S.K.S. Gupta , T. Srinivas, B.V. Reddy, *Parametric Simulation of Steam Injected Gas Turbine combine cycle*, Int. J. of I Mech E, Part A: Power and Energy, Vol No.221, Issue No.7, pp.873-883, 2007
- > A.V.S.S.K.S.Gupta, B.V. Reddy, *Effect of Pressure on Thermal aspects of the riser column of a pressurized circulating fluidized bed combustor*, International of Energy Research, Vol No.30, Issue No.03, pp.149-162, 2006
- > A.V.S.S.K.S.Gupta, B.V. Reddy , P.K. Nag, *Parametric analysis of coal based combined cycle power plant*, International Journal of Energy Research, Vol No.30, Issue No.01, pp.19-36, 2006
- > A.V.S.S.K.S.Gupta, B.V. Reddy, *Bed-to-Wall heat transfer modeling in the top region of a CFB riser column with abrupt exit geometries*, International Journal of Heat and Mass Transfer, Vol No.48, pp.4307-4315, 2005
- > A.V.S.S.K.S.Gupta, P.K.Nag, *Bed-To-Wall Heat Transfer Behaviour In A Pressurised Circulating Fluidized Bed (PCFB)*, International Journal of Heat and Mass Transfer, Vol No.45, pp.3429-3436, 2002
- > A.V.S.S.K.S.Gupta, P.K.Nag, *Prediction Of Heat Transfer Coefficient In A Cyclone Separator Of A CFB*, International Journal of Energy Research, Vol No.24, pp.1065-1079, 2000
- > A.V.S.S.K.S.Gupta, P.K.Nag , *Fin Heat Transfer Studies In The Cyclone Separator Of A CFB*, Vol No.20, Issue No.2, pp.28-34, Taylor&Francis, 1999
- > A.V.S.S.K.S.Gupta, *Energy Analysis Of The Kalina Cycle*, Vol No.18, Issue No.06, pp.427-439, 1998
- > A.V.S.S.K.S.Gupta, 2. B.V.S.S.Prasad, *Note On The Performance Of A Optimal Siraight Rectangular Fin With A Semicircular Cut At The Tip*, Vol No.19, Issue No.01, pp.53-58, Taylor & Francis, 1997

#### National Journals

- > Gupta A.V.S.S.K.S., Deepak, K, *Modeling and Analysis of Low Temperature Kalina Cycle System*, Journal of Chemical and Pharmaceutical Sciences, ISBN No.0974-2115, Issue No.2, pp.35-40, August, 2016
- > A.V.S.S.K.S. Gupta, K. Deepak, P.V. Durga Prasad, *Investigation of Trapezoidal-Cut Twisted Tape Insert in a Double Pipe U-Tube Heat Exchanger using Al2O3 Nanofluid*, Procedia Materials Science Journal, Elsevier Ltd., Vol No.10, pp.50-63, 2015
- > AVSSKS Gupta, N. M. Rao, G. K. Pujari, 89. *Two Phase Flow Pressure drop Measurement on Airlift loop with Multiple Risers*, International Journal of Innovative Research in Science, Engineering and Technology, ISBN No.ISSN: 2319-8753, Vol No.40, Issue No.2, pp.628-632, february, 2015
- > AVSSKS Gupta, 89. *Two Phase Flow Pressure drop Measurement on Airlift loop with Multiple Risers*, International Journal of Innovative Research in Science, Engineering and Technology, ISBN No.ISSN: 2319-8753., Vol No.40, Issue No.2, pp.628-632, february, 2015
- > A.V.S.S.K.S. Gupta , K. Deepak , *Thermal Performance of Geothermal Power Plant with Kalina Cycle System*, International Journal of Thermal Technologies , Issue No.E-ISSN 2277 à€“ 4114 , pp.61-64, 2014
- > Gupta A V S S K S, Rama Narasihma K, Sreenivasa Rao, *Influence of working fluid on the performance of single loop pulsating heat pipe*, Journal of Emerging Technology and Advanced Engineering, Vol No.3, Issue No.4, pp.460-464, 2013
- > Gupta A V S S K S, Sridhar Patnaik V, Venkateswara Rao G, 84. *Near Optimum Configuration of stepped hinged beams with buckling load constraint*, Journal of Structural Engineering, Vol No.40, Issue No.2, pp.105-114, 2013
- > Gupta A V S S K S, Venkateswara Rao G , Sridhar Patnaik V, *Mechanical and Thermal Buckling loads of axi symmetric concentric compound stepped circular plates containing two different materials*, Indian Journal of Mechanical Engineering Research, Vol No.1, Issue No.1, pp.131-142, 2013
- > Gupta A V S S S, Venkateswara Rao G , Sridhar Patnaik V, *Optimum configuration of stepped simply supported beam with respect to buckling temperature*, Journal of Structural Engineering, Vol No.39, Issue No.2, pp.178-183, 2012
- > A.V.S.S.K.S.Gupta, Satish Kumar , J. Ramanathan, Ch. V. Ram Mohan, *Characterisation of Materials Used in Flex Bearings of Large Solid Rocket Motors*, Defence Science Journal, Vol No.61, Issue No.3, pp.264-269, 2011
- > A.V.S.S.K.S.Gupta , N.R.M.R. Bhargava, G. Swami Naidu, *Deformational Ingomogeneity in Al-4Mg Alloy-Microhardness Study*, JMTR, Vol No.3, pp.3-4, 2011
- > A.V.S.S.K.S.Gupta, Ratnakar Pandu, K.L.Yadav, Amit Kumar, P. Ravinder Reddy , *Effect of Sintering Temperature on Structure and Electrical Properties of BiFeO3 Multiferroics*, Ind. J. of Engineering and Materials Sciences, Vol No.17, pp.481-485, 2010
- > A.V.S.S.K.S.Gupta, M.V.S.Murali Krishna, K. Kishor, S.Narasimha Kumar, D.N. Reddy, S.S.R. Prasad, *The Emission From Copper Coated Spark Ignition Engine With Methanol Blended Gasoline With Catalytic Converter*, Indian J. Environmental Protection, Vol No.30, Issue No.3, pp.177-183, 2010
- > A.V.S.S.K.S.Gupta, S.Narasimha Kumar, K. Kishor, M.V.S.Murali Krishna, D.N. Reddy, *Investigations on reduction of carbon monoxide in spark ignition engine with catalytic converter with gashol*, Eco. Env. Cons. Journal, Vol No.16, Issue No.3, pp.389-393, 2010
- > A.V.S.S.K.S.Gupta, S.Narasimha Kumar, D.N. Reddy, M.V.S.Murali Krishna, K. Kishor, *Control of Pollutants from copper coated spark ignition engine with gashol*, Vol No.29, Issue No.3, pp.391-395, 2010
- > A.V.S.S.K.S. Gupta, M.V.S.Murali Krishna, K. Kishor, D.N.Reddy, S. Narasimha Kumar, *Emission characteristics of high speed spark ignition engine with catalytic converter*, Vol No.21, Issue No.3, pp.607-621, 2009
- > A.V.S.S.K.S. Gupta , T. Srinivas, B.V. Reddy, *Thermodynamic Modeling Optimization of Multipressure heat recovery steam generator in combined power cycle*, . of Scientific and Industrial Research, Vol No.67, pp.827-834, 2008
- > A.V.S.S.K.S. Gupta , T. Srinivas, B.V. Reddy, *Performance Simulation of 210 MW Natural Gas Fired Combined Cycle Power Plant*, Journal of Energy, Heat and Mass Transfer, Vol No.29, pp.61-82, 2007
- > A.V.S.S.K.S. Gupta , T. Srinivas, B.V. Reddy, *Thermodynamic Analysis of Rankine cycle with generalization of feed water heaters*, Journal of Institution of Engineers (India), Vol No.89, pp.56-63, 2007
- > A.V.S.S.K.S.Gupta, A.V. Ratna Prasad, K. Murali Mohan Rao, K Mohan Rao , *Rice Straw Polyester Composites*, Indian Journal of Fibre and Textile Research, Vol No.32, pp.399-403, 2007
- > A.V.S.S.K.S.Gupta, K Mohan Rao , A.V. Ratna Prasad, K. Murali Mohan Rao, *Effect of Fibre Loading on Mechanical Properties of Arcaunt Fiber reinforced Polyester Composites*, National Journal of Technology, Vol No.2, Issue No.1, pp.56-62, 2007
- > A.V.S.S.K.S.Gupta, S.K. Ajmani, S.K.Choudury, Punit Gupta, J.B. Singh, *Modelling of Liquid Steel Flow Through Slab Caster Submerged Entry Nozzle and Mould*, pp.151-158, TATA Search, 2001
- > A.V.S.S.K.S.Gupta , P.K.Nag, D Kumar, *Effect of pressure on Bed Hydrodynamics in a Pressurised Circulating Fluidized Bed (PCFB)*, Journal of Institution of Engineers (India), Vol No.79, pp.74-78, 1998

#### -> Honors & Professional Activities

##### -> Professional Activities

- > ISTE secretary cum treasurer for JNTU College of Engineering
- ISTE Executive council member (2020-2024)À
- ISTE Secretary cum Treasurer for Telangana section (2020-2024)
- Life Member for ISTE
- Life Member for ISHMT

##### -> Administrative Positions Held

- > Head of the Department, JNTUH College of Engineering Hyderabad, 02 Nov 2018 - Present
- > Controller of Examinations, JNTUH, 03 Oct 2012 - 03 Oct 2016
- > Hostel Manager, JNTUH College of Engineering Hyderabad, 07 Jul 2006 - 13 Dec 2008
- > Deputy Warden for Boys Hostels, JNTUH College of Engineering Hyderabad
- > Officer Incharge of Examinations, JNTUH College of Engineering Hyderabad
- > Officer incharge of Nodal centre, JNTUH
- > Special Officer, JNTUH College of Engineering Hyderabad
- > TEQIP - III (ATU) Coordinator, JNTUH

- Students

Student Name	Title	Year	Download
P. Ashok Kumar	De-lamination modeling and fracture control in FRP composite materials	2020	
Suresh Kumar Grandhi	Simulation and Experimental investigations of coal and Bio mass Gasification for CO <sub>2</sub> capture using CaO Sorbent	2019	
Girijacharya Pujari	Experimental Investigations to study the Hydrodynamic Behaviour of External Loop	2019	
G. Narendar	Investigation on Natural Circulation Loop with Compact Heat Exchanger and using Nano-fluid as loop fluid	2017	
Kolar Deepak	Thermodynamic Analysis of Low temperature Kalina cycle configuration for utilization of Geothermal energy	2017	
Basma	Hydrodynamic and Heat transfer studies in a circulating fluidized bed	2017	
Gunti Rajesh	Experimental Investigation on Natural Fiber Composites	2016	
Sreedhar Patnaik	Buckling analysis of non Uniform Beams and plates	2016	
Ch Sreenivasa Rao	Parametric investigation on the performance of a loop pulsating heat pipe	2016	
Malladi Ch. Sastry	Experimental and Computational studies on Slot jet Impingement	2016	
Sreeram Murthy	Experimental Investigations on Flow and heat transfer characteristics of NACA 0018 Aerofoil	2016	
B Ravi	Development of formulations for thermal post buckling behaviour of structural members with large deflections	2016	
Inugula Rajasree	Synthesis and Analysis of Epicyclic Gear trains using Graph Theory	2015	
P.V. Durga Prasad	Experimental investigation of heat transfer enhancement with different inserts for Al <sub>2</sub> O <sub>3</sub> nano-fluids in double pipe U tube heat exchanger	2015	
D R Srinivasan	Simulation of Combustion process in gas turbine combustor using CFD	2013	
K. Kishor	Investigations on catalytically actuated two stroke S I Engine with Alcohol blended gasoline	2013	
Ch V Rammohan	Design, modelling and experimental validation on a typical flex bearing joint of rocket motor nozzle	2011	
M. Sreeramulu	Thermodynamic Analysis of Gas turbine fuel cell based combined power plants for micro power generation	2011	
M. Swami Naidu	Deformation and Ageing Studies on dilute and concentrated Aluminium and Magnesium Alloys	2011	
P. Ratnakar	Investigations on Synthesis & Characterisation of nano-ceramic composites and simulation studies on modelling and analysis of single and multi-walled carbon nano-tubes	2010	
P. Venkata Ramana	Microstructure, Mechanical Property Characterization and residual stress analysis of similar and dissimilar metal welds	2009	
T. Srinivas	Thermodynamic Analysis of Advanced Combined Power cycles for Clean Coal Technologies	2007	
A V Ratna Prasad	Fabrication and Testing of Natural Composite Reinforced Composites	2006	

→ Countries/Foreign Universities

→ University of New Brunswick, Fredericton, CANADA , 06-05-2004 to 22-07-2004 Post PhD research work

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